Peatland Restoration Outcomes

Carbon and water-table results from the uplands programme

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Outline

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- Method
- Results
- Conclusion

Background

Why degraded peat matters

- Drained peatland is a net carbon source, not a sink
- Water-table depth is the single strongest predictor of emissions
- Restoration reverses both, but on a multi-year timescale

Method

Two restoration techniques compared

Gully blocking

- Cheap, fast to install
- Raises local water table quickly

Bunding

- Higher upfront cost
- More stable long-term retention

Results

Water table depth, before and after

Site	Before (cm)	After 3yr (cm)
Moorhouse	-42	-11
Kielderhead	-38	-14
Teesdale	-51	-9

Negative values are below the surface; all three sites moved closer to the near-surface water table that active peat formation needs.

Conclusion

What we recommend

1. Prioritise bunding on sites with unstable subsoil
2. Continue gully blocking as the low-cost default elsewhere
3. Re-survey at year five to confirm carbon flux has turned net-negative

Thank you